

CLAIMS

1. A digital data selling and buying transaction system for performing selling and buying transactions for an encryption key for encrypted digital data among a plurality of terminal units connected through a communication network, comprising the processes of:

receiving buying request data representing a buying order and a buying condition for the encryption key for the encrypted digital data, the buying request data being transmitted through the communication network;

receiving selling request data representing a selling request and a selling condition for the encryption key for the encrypted digital data, the selling request data being transmitted through the communication network;

deciding a transaction price for the encryption key for the digital data corresponding to the received buying request data and selling request data for the encryption key; and

concluding transactions of the buying request and the selling request corresponding to the decided transaction price.

2. The digital data selling and buying transaction system as set forth in claim 1, further comprising the process of:

storing information with respect to selling

and buying transactions.

3. The digital data selling and buying transaction system as set forth in claim 1, further comprising the process of:

5 publicizing the information with respect to selling and buying transactions through the communication network.

4. The digital data selling and buying transaction system as set forth in claim 1,

10 wherein the use of the digital data has been limited.

5. The digital data selling and buying transaction system as set forth in claim 1, wherein the digital data is character data.

15 6. The digital data selling and buying transaction system as set forth in claim 1, wherein the digital data is picture data.

7. The digital data selling and buying transaction system as set forth in claim 1, wherein the digital data is audio data.

20 8. The digital data selling and buying transaction system as set forth in claim 1, wherein the digital data is program data for a game.

25 9. The digital data selling and buying transaction system as set forth in claim 1, further comprising the process of:

storing the digital data to a device that performs a process for concluding the selling and buying transactions.

10. The digital data selling and buying transaction system as set forth in claim 1,

wherein the process for concluding the selling and buying transactions is performed corresponding to the transaction price.

11. The digital data selling and buying transaction system as set forth in claim 10,

wherein the transaction price is stored in a device that performs a process for concluding the selling and buying transactions as the time elapses.

12. The digital data selling and buying transaction system as set forth in claim 1,

wherein the process for concluding the selling and buying transactions is performed corresponding to information with respect to people concerned with selling and buying transactions.

13. The digital data selling and buying transaction system as set forth in claim 12,

wherein the information with respect to the people concerned contains identification information and personal information thereof.

14. The digital data selling and buying transaction system as set forth in claim 1, further comprising the process of:

publicizing part or all of information with respect to a process for concluding the selling and buying transactions through the communication network.

15. The digital data selling and buying

5 transaction system as set forth in claim 1,

wherein part of all of information with respect to a process for concluding the selling and buying transactions is stored and the stored content is frequently rewritten.

16. The digital data selling and buying

10 transaction system as set forth in claim 1,

wherein buyer side data that represents the buying condition is data with respect to a buying price.

17. The digital data selling and buying

15 transaction system as set forth in claim 1,

wherein buyer side data that represents the buying condition is data with respect to a buying transaction execution date.

18. The digital data selling and buying

20 transaction system as set forth in claim 1,

wherein buyer side data that represents the buying condition is data with respect to a buying transaction settlement method.

19. The digital data selling and buying

25 transaction system as set forth in claim 1,

wherein seller side data that represents the selling condition is data with respect to a selling

price.

20. The digital data selling and buying transaction system as set forth in claim 1,

wherein seller side data that represents the selling condition is data with respect to a selling transaction execution date.

21. The digital data selling and buying transaction system as set forth in claim 1,

wherein seller side data that represents the selling condition is data with respect to a selling transaction settlement method.

22. The digital data selling and buying transaction system as set forth in claim 1, further comprising the process of:

settling concluded selling and buying transactions and generating data with respect to a paying and receiving process corresponding to the settled result.

23. The digital data selling and buying transaction system as set forth in claim 22, further comprising the process of:

rewriting asset information of personal information of people concerned with the settled selling and buying transactions so as to pay and/or receive the price with respect to the selling and buying transactions.

24. The digital data selling and buying

transaction system as set forth in claim 22,
 wherein the digital data has been encrypted
 so as to limit the use thereof, and

wherein the digital data is converted into
 5 data that can be used by a process performed with
 auxiliary data corresponding to the digital data.

25. The digital data selling and buying
 transaction system as set forth in claim 24,

wherein the transaction price is decided for-
 10 the auxiliary digital data.

26. The digital data selling and buying
 transaction system as set forth in claim 24, further
 comprising the process of:

storing the auxiliary digital data to a
 15 device that performs a process for concluding the
 selling and buying transactions.

27. The digital data selling and buying
 transaction system as set forth in claim 24,

wherein the process for concluding the
 20 selling and buying transactions is performed
 corresponding to identification information of the
 auxiliary digital data.

28. The digital data selling and buying
 transaction system as set forth in claim 24,

wherein the process for concluding the
 25 selling and buying transactions is performed
 corresponding to the number of the buyer side data

and/or the number of the seller side data with respect to the digital data and/or the auxiliary digital data.

29. The digital data selling and buying transaction system as set forth in claim 28,

5 wherein the number of the buyer side data and/or the number of the seller side data with respect to the digital data and/or the auxiliary digital data are stored in a device that performs a process for concluding the selling and buying transactions as the
10 time elapses.

30. The digital data selling and buying transaction system as set forth in claim 24,

wherein the process for concluding the selling and buying transactions is performed
15 corresponding to the number of the digital data and/or the number of the auxiliary digital data that can be supplied and/or received.

31. The digital data selling and buying transaction system as set forth in claim 30,

20 wherein the number of the digital data and/or the number of the auxiliary digital data that can be supplied and/or received are stored in a device that performs a process for concluding the selling and buying transactions as the time elapses.

25 32. The digital data selling and buying transaction system as set forth in claim 24,

wherein the process for concluding the

selling and buying transactions is performed with:
the number and contents of the buyer side
data and/or the number and contents of the seller side
data corresponding to the digital data and/or the
5 auxiliary digital data, and

the number of the digital data and/or the
number of the auxiliary digital data that can be
supplied and/or received, and

wherein selling and buying transactions
10 concluding process comprises the process of:

reading the number of the buyer side data
and/or the number of the seller side data corresponding
to the digital data and/or the auxiliary digital data
and the number of the digital data and/or the number of
15 the auxiliary digital data that can be supplied and/or
received, the number of the buyer side data, the number
of seller side data, the number of the digital data,
and the number of the auxiliary digital data having
been stored; and

20 deciding a transaction price corresponding to
data that is read by the first reading process.

33. The digital data selling and buying
transaction system as set forth in claim 24,

wherein the process for concluding the
25 selling and buying transactions is performed
corresponding to:

information with respect to people concerned

with the selling and buying transactions,

identification information of the auxiliary digital data, and

a transaction price decided for the digital data and/or the auxiliary digital data, and

wherein the process for concluding the selling and buying transactions comprises the processes of:

reading the information with respect to the people concerned, the identification information of the auxiliary digital data, and the transaction price decided for the digital data and/or the auxiliary digital data, the information with respect to the people concerned, the identification information of the auxiliary digital data, and the transaction price decided for the digital data and/or the auxiliary digital data having being stored; and

deciding the transaction price corresponding to the data that is read by the second reading process.

34. The digital data selling and buying transaction system as set forth in claim 24, further comprising the process of:

transmitting the digital data and/or the auxiliary digital data with respect to the concluded selling and buying transactions to a buyer with respect to the concluded selling and buying transactions through the communication network.

35. An auxiliary digital data selling and buying system, comprising: a selling processing device for performing a process for selling auxiliary digital data with respect to a process for canceling the limitation of the use of digital data; a buying processing device for performing a process for buying the auxiliary digital data; and a selling and buying processing device for performing a process for receiving a selling request from said selling processing device and a buying request from said buying processing device and concluding selling and buying transactions, said selling processing device, said buying processing device, and said selling and buying processing device being connected through a communication network,

wherein said selling processing device comprises:

transmitting means for transmitting user identification information and a selling request of a selling applicant of the auxiliary digital data through the communication network,

receiving means for receiving a selling notification for the digital data transmitted from said selling and buying processing device through the communication network,

erasing means having a function for erasing the auxiliary digital data, and

controlling means for controlling said

transmitting means so that the user identification information and the selling request are transmitted to said selling and buying processing device and controlling said erasing means so that the auxiliary data is erased when said receiving means has received the selling notification transmitted from said selling and buying processing device through the communication network,

wherein said buying processing device comprises:

transmitting means for transmitting user identification information and a buying request of a buying applicant of the auxiliary digital data through the communication network,

receiving means for receiving a buying notification of the digital data and/or the auxiliary digital data transmitted from said selling and buying processing device through the communication network, and

controlling means for controlling said transmitting means so that the user identification information and the buying request are transmitted to said selling and buying processing device through the communication network, and

wherein said selling and buying processing device comprises:

receiving means for receiving the user

identification information and the selling request transmitted from said selling processing device through the communication network and/or the user identification information and the buying request transmitted from said buying processing device through the communication network,

storing means for storing user management information and the auxiliary digital data, the user management information correlating the user identification information and information that represents the state of ownership of the auxiliary digital data and the digital data,

selling and buying transaction concluding processing means for concluding the selling and buying transactions of the auxiliary digital data corresponding to the user identification information and the selling request received by said receiving means from said selling processing device and the user identification information and the buying request received by said receiving means from said buying processing device.

transmitting means having a function for transmitting the auxiliary digital data and a selling notification thereof through the communication network, and

controlling means for performing a process
for updating the user management information stored in

said storing means corresponding to the user identification information of the selling applicant and/or the user identification information of the buying applicant received by said receiving means, a process for reading the auxiliary digital data to be transmitted from said storing means to the buying applicant, a process for controlling said transmitting means so that the auxiliary digital data that has been read to said buying processing device, and a process for controlling said transmitting means so that the selling notification is transmitted to said selling processing device, when the selling and buying transactions of the auxiliary digital data have been concluded.

36. The auxiliary digital data selling and buying system as set forth in claim 35,

wherein said storing means of said selling and buying processing device further stores the digital data,

wherein said transmitting means of said selling and buying processing device has a function for transmitting the digital data, and

wherein said controlling means of said selling and buying processing device performs a process for reading the digital data to be transmitted from said storing means to the buying applicant and a process for controlling said transmitting means so that

the digital data that has been read is transmitted to said buying processing device.

37. The auxiliary digital data selling and buying system as set forth in claim 36,

5 wherein said selling and buying processing device performs an encrypting process for the digital data with respect to the auxiliary digital data before transmitting the digital data to said buying processing device.

10 38. The auxiliary digital data selling and buying system as set forth in claim 35,

 wherein the auxiliary digital data contains information with respect to user identification information of a person who has the right of use of the
15 digital data corresponding to the auxiliary digital data.

39. The auxiliary digital data selling and buying system as set forth in claim 38,

 wherein said selling and buying processing
20 device performs a process for rewriting information with respect to user identification information of a person who has the right of use for digital data corresponding to the auxiliary digital data before transmitting the auxiliary digital data to said buying
25 processing device.

40. The auxiliary digital data selling and buying system as set forth in claim 35,

wherein said selling and buying processing device further performs a process for settling concluded selling and buying transactions and generating data with respect to a paying and receiving process corresponding to the settled result.

41. The auxiliary digital data selling and buying system as set forth in claim 40,

wherein said selling and buying processing device further performs a process for rewriting asset information of personal information of people concerned with the concluded selling and buying transactions through the communication network so that the price with the selling and buying transaction is paid and/or received.

42. The auxiliary digital data selling and buying system as set forth in claim 40,

wherein if a person concerned with selling and buying transactions is a selling applicant of auxiliary digital data corresponding to digital data and a buying application of auxiliary digital data corresponding to another digital data, when both selling and buying transactions corresponding to a selling request and a buying request of the person are concluded,

said selling and buying processing apparatus performs a process for calculating the sum of asset transferred in each of the concluded selling and buying

transactions as part of data with respect to the paying and receiving process,

said selling and buying processing device performs a process for causing said selling processing device of the person to erase the auxiliary digital data corresponding to the digital data, and

said selling and buying processing device performs a process for transmitting the auxiliary digital data corresponding to the other digital data to - said buying processing device of the person.

43. The digital data selling and buying transacting method as set forth in claim 42,

wherein said selling and buying processing device further performs a process for rewriting asset information of personal information of the person concerned corresponding to the sum of the transferred asset so that the price for the selling and buying transactions is paid and/or received.

44. A digital data selling and buying transaction method for performing selling and buying transactions for digital data through a wired or wireless communication network, comprising the steps of:

receiving buyer side data that represents a buying order for digital data and a buying condition through the communication network;

receiving seller side data that represents a selling order for digital data and a selling condition

through the communication network;

deciding a transaction price of the digital data corresponding to the number and contents of the buyer side data and the number and contents of the seller side data; and

concluding the selling and buying transactions corresponding to the transaction price.

45. An auxiliary digital data selling and buying method, comprising the steps of performing a process for selling auxiliary digital data with respect to a process for canceling the limitation of the use of digital data; performing a process for buying the auxiliary digital data; and performing a process for receiving a selling request from the selling processing step and a buying request from the buying processing step and concluding selling and buying transactions, the selling processing step, the buying processing step, and the selling and buying processing step being performed by transmitting and receiving data through a communication network,

wherein the selling processing step comprises the steps of:

transmitting user identification information and a selling request of a selling applicant of the auxiliary digital data through the communication network,

receiving a selling notification for the

step comprises the steps of:

receiving the user identification information
and the selling request transmitted from the selling
processing step through the communication network
5 and/or the user identification information and the
buying request transmitted from the buying processing
step through the communication network,

storing user management information and the
auxiliary digital data, the user management information
10 correlating the user identification information and
information that represents the state of ownership of
the auxiliary digital data and the digital data,

concluding the selling and buying
transactions of the auxiliary digital data
15 corresponding to the user identification information
and the selling request received by the receiving step
from the selling processing step and the user
identification information and the buying request
received by the receiving step from the buying
20 processing step,

having a function for transmitting the
auxiliary digital data and a selling notification
thereof through the communication network, and

performing a process for updating the user
25 management information stored in the storing step
corresponding to the user identification information of
the selling applicant and/or the user identification

information of the buying applicant received by the receiving step, a process for reading the auxiliary digital data to be transmitted from the storing step to the buying applicant, a process for controlling the transmitting step so that the auxiliary digital data that has been read to the buying processing step, and a process for controlling the transmitting step so that the selling notification is transmitted to the selling processing step, when the selling and buying transactions of the auxiliary digital data have been concluded.

46. A digital data selling and buying transaction apparatus for performing selling and buying transactions for an encryption key for encrypted digital data among a plurality of terminal units connected through a communication network, comprising:

first receiving means for receiving buying request data that represents a buying order and a buying condition for an encryption key for encrypted digital data from a buying requesting device through the communication network;

second receiving means for receiving selling request data that represents a selling order and a selling condition for an encryption key for encrypted digital data from a selling requesting device through the communication network;

transaction condition determining means for

determining whether or not transactions are concluded with the transaction conditions for the encryption key for the digital data corresponding to the buying request data for the encryption key and the selling request data for the encryption key; and

key movement controlling means for controlling the movement of the encryption key for the digital data from the selling requesting device to the buying requesting device corresponding to the concluded transactions determined by said transaction condition determining means.

47. The digital data selling and buying transaction apparatus as set forth in claim 46, further comprising:

selling request storing means for storing
selling request data transmitted from the selling
requesting device,

wherein said transaction condition determining means determines whether or not transactions are concluded corresponding to transaction conditions for the encryption key for the digital data, the transaction conditions being stored in said buying request storing means and said selling request storing means.

48. The digital data selling and buying transaction apparatus as set forth in claim 47, further comprising:

buying request data sorting means for sorting the buying request data stored in said buying request storing means corresponding to a predetermined condition.

49. The digital data selling and buying transaction apparatus as set forth in claim 47, further comprising:

selling request data sorting means for sorting the selling request data stored in said selling request storing means corresponding to a predetermined condition.

50. The digital data selling and buying transaction apparatus as set forth in claim 46, further comprising:

content attribute storing means for storing content attribute data that represents whether or not key data for digital data corresponding to a buying request transmitted from the buying requesting device has been permitted to be circulated; and

a first transaction permission determining portion for determining whether or not transactions for key data for digital data corresponding to a buying request transmitted from the buying requesting device can be permitted corresponding to content attribute

data stored in said content attribute storing means.

51. The digital data selling and buying transaction apparatus as set forth in claim 46, further comprising:

5 content attribute storing means for storing content attribute data that represents whether or not key data for digital data corresponding to a selling request transmitted from the selling requesting device has been permitted to be circulated; and

10 a second transaction permission determining portion for determining whether or not transactions for key data for digital data corresponding to a selling request transmitted from the selling requesting device can be permitted corresponding to content attribute data stored in said content attribute storing means.

15 52. The digital data selling and buying transaction apparatus as set forth in claim 51, further comprising:

20 content attribute managing means for updating the content attribute data stored in said content attribute storing means corresponding to a request of a content right owner.

53. The digital data selling and buying transaction apparatus as set forth in claim 46, further comprising:

25 use limit information transmitting means for transmitting information to the selling requesting

device, the information causing the use of key data for digital data corresponding to a selling request stored in said selling requesting device to be temporarily limited for a predetermined period.

5 54. The digital data selling and buying transaction apparatus as set forth in claim 46, wherein the digital data selling and buying transacting apparatus has data that causes the key data for the digital data to be erased from the selling
10 requesting device, and

wherein said key movement controlling means controls said erase data transmitting means so that the key data for the digital data whose selling and buying transactions have been concluded are erased from the
15 selling requesting device.

55. The digital data selling and buying transaction apparatus as set forth in claim 46, further comprising:

black list storing means for storing a
20 condition in which transactions are prohibited; and

transaction permission determining means for determining whether or not the received selling request data complies with the condition in which the transactions are prohibited,

25 wherein when the received selling request data complies with the condition in which the transactions are prohibited, the transactions are

prohibited.

56. The digital data selling and buying transaction apparatus as set forth in claim 55,

wherein the condition in which the

5 transactions are prohibited and that is stored in said black list storing means is updated when said key movement controlling means has failed to move the key.

57. The digital data selling and buying transaction apparatus as set forth in claim 56, further comprising:

10 sold key management data storing means for storing information with respect to the encryption key for the digital data sold and moved by said key movement controlling means,

15 wherein said transaction permission determining portion prohibits transaction of the encryption key for the digital data corresponding to the selling request data when the encryption key is managed with the sold key management data.

20